

JAY A. WILLIAMS - PRINCIPAL ENGINEER

Jay A. Williams received a BS in Engineering from Brown University in 1965 and a Master of Business Administration from New York University in 1972. He joined the Consolidated Edison Company of New York in 1965, and held engineering positions in several groups at Con Edison until he joined Power Technologies, Inc. in 1973. He served in the U.S. Air Force, Base Civil Engineers, in the 1960's. He and John Cooper founded Power Delivery Consultants, Inc in 1992.

As a Senior Engineer in charge of Con Edison's Transmission Cable Group, Mr. Williams' responsibilities included system design and preparation of specifications for 138-kV and 345-kV underground transmission lines and accessory equipment; economic studies of proposed underground transmission systems; field supervision for nonstandard construction operations; and fault analysis and repair. He had responsibility for detailed design of cable bays for the Waltz Mill Cable Test Facility. He was Project Engineer for installation of the world's first underground 345-kV SF₆ - insulated transmission line, and supervised the construction of the line in 1971.

After joining PTI, Mr. Williams was responsible for experimental projects for the forced cooling of high-pressure, fluid-filled cable circuits. These projects were the first ones to undertake the installation, instrumentation, and analysis of a full-scale cable system. He was also project engineer for an EPRI-sponsored study to develop rapid and accurate leak location systems for buried cables.

Mr. Williams has conducted technical and economic studies of alternate underground systems, for voltages from 138 kV to 500 kV ac, as well as HVDC. He has prepared testimony and represented utilities and commissions in hearings. He designed and supervised the construction of an extensive uprating project for existing pipe-type cables, and has been responsible for engineering analysis, specifications, bid review, and field supervision for many underground and submarine cable projects for both utilities and architect-engineers.

In addition to utility design/installation projects, he was project engineer for the EPRI – funded development of the ACE program to perform technical and economic analyses of cable systems. He was in charge of the EPRI project to prepare the 1992 edition of the Underground Transmission Systems Reference Book; he wrote the Cable Ampacity chapter plus several other chapters of the book. He was also project engineer for the EPRI Underground Transmission Workstation project, as well as several other EPRI-funded projects — including the Distributed Fiber Optic Temperature Monitoring development. He has taught many courses and seminars for underground transmission cables, from system planning to field operation & maintenance.

Mr. Williams is a Fellow of the IEEE, and member of the Power Engineering Society and Electrical Insulation Society. He is a Voting Member of the IEEE Insulated Conductors Committee and served as Chairman of the Insulations Subcommittee. Mr. Williams has authored more than fifty technical articles and papers, and was co-author of the Underground Transmission Systems section of the McGraw-Hill Standard Handbook for Electrical Engineers. He is a registered Professional Engineer in the States of New York and Ohio.